

#GaviSeth

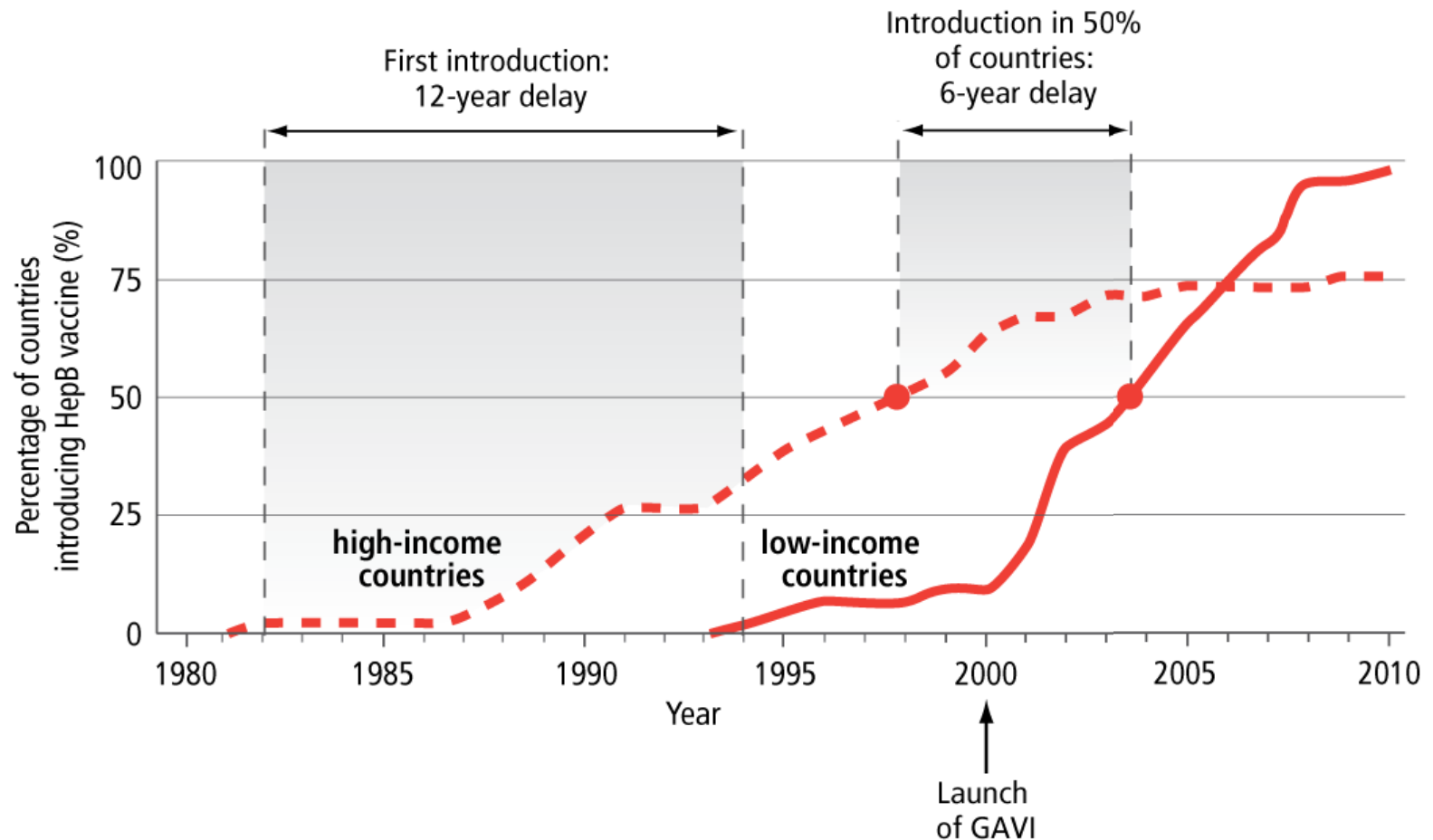
# Shaping the market: Gavi's model for bringing the power of vaccines to the world's poorest children

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Seth Berkley MD  
National Vaccine Advisory  
Committee  
2 February 2015,  
Washington DC

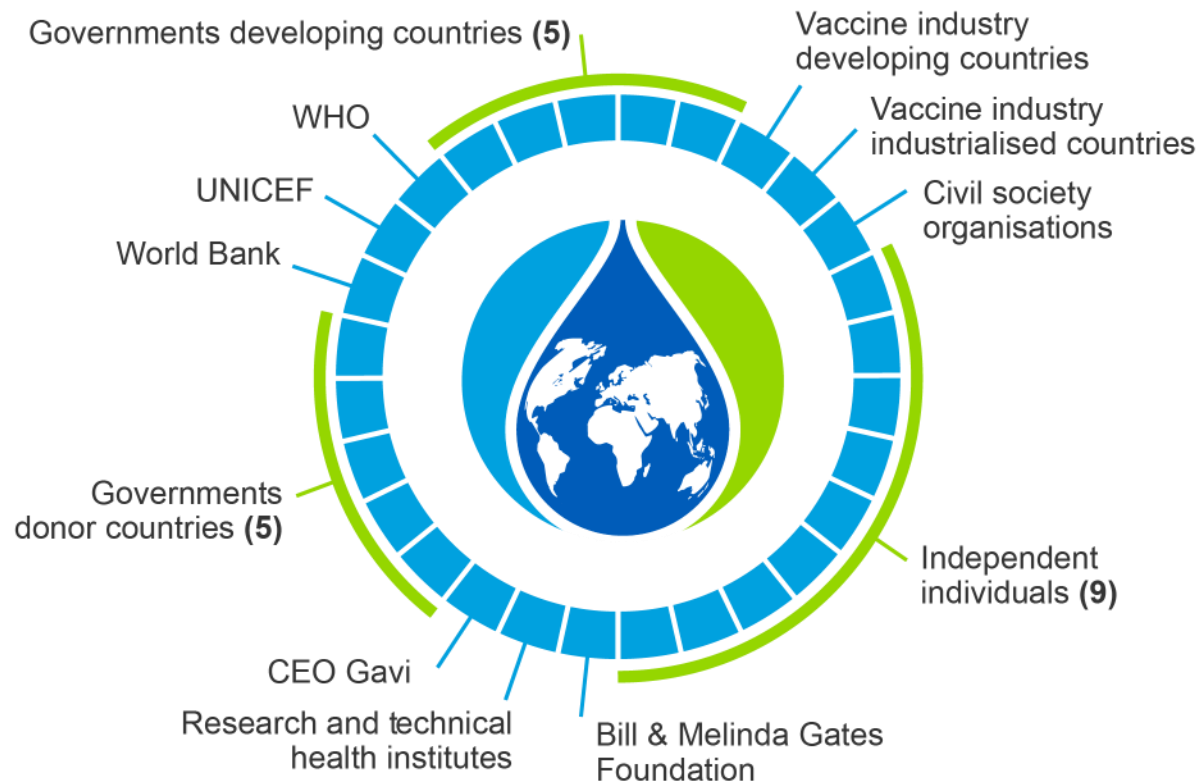


# The challenge: Reducing delays in launching new vaccines in poor countries

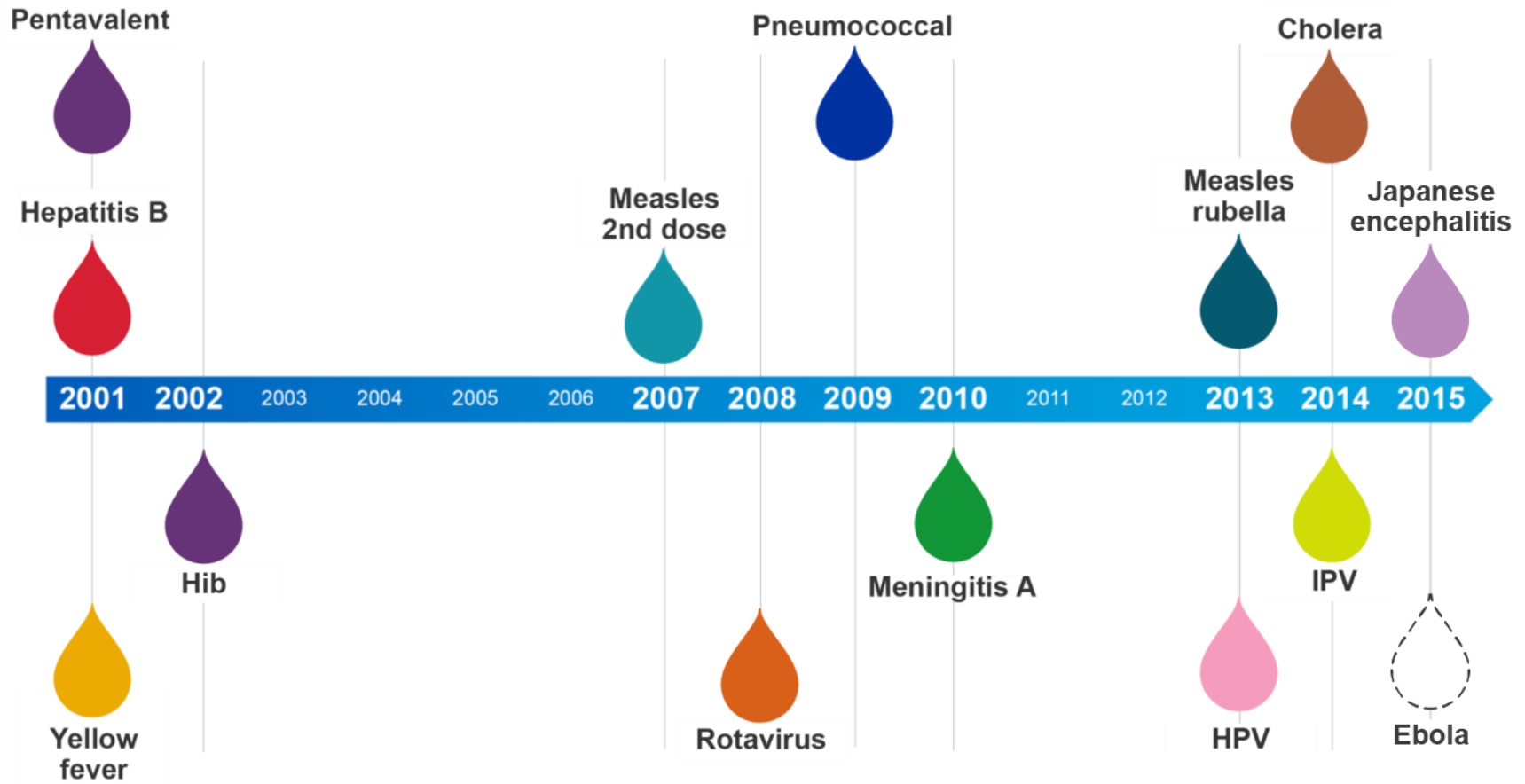


# Gavi: an innovative public-private partnership

## Building on the comparative advantages of both public and private partners



# Gavi-supported vaccination programmes: an overview



Refers to the first Gavi-supported introduction of each vaccine.

# Vaccine Investment Strategy: Gavi's approach to prioritising new vaccines

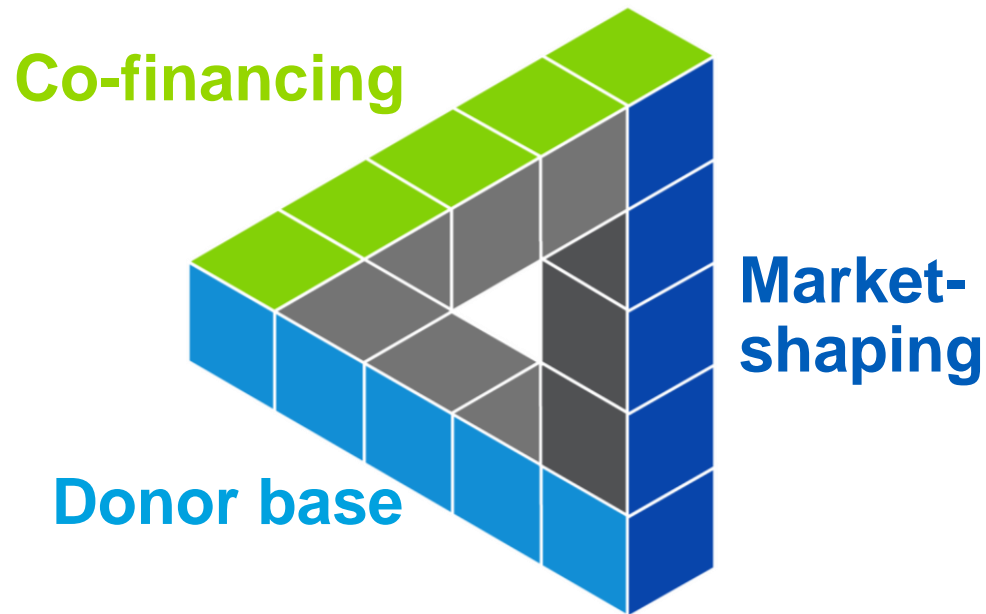
- Cholera
- Dengue
- Hepatitis A
- Hepatitis B (birth dose)
- Hepatitis E
- Influenza\*
- Meningococcal CYW
- Malaria
- Rabies
- Yellow Fever\*\*
- DTP booster
- Enterovirus 71
- Mumps

\* Maternal vaccination

\*\* Additional mass campaigns

| Category                         | VIS Criteria                              |
|----------------------------------|---|
| Health impact                    | Impact on child mortality                 |
|                                  | Impact on overall mortality               |
|                                  | Impact on overall morbidity               |
| Additional impact considerations | Epidemic potential                        |
|                                  | Global or regional public health priority |
|                                  | Herd immunity                             |
|                                  | Availability of alternative interventions |
|                                  | Socio-economic inequity                   |
|                                  | Gender inequity                           |
| Implementation feasibility       | Disease of regional importance            |
|                                  | Capacity and supplier base                |
|                                  | GAVI market shaping potential             |
|                                  | Ease of supply chain integration          |
|                                  | Ease of programmatic integration          |
| Cost and value for money         | Vaccine efficacy and safety               |
|                                  | Vaccine procurement cost                  |
|                                  | In-country operational cost               |
|                                  | Procurement cost per event averted        |

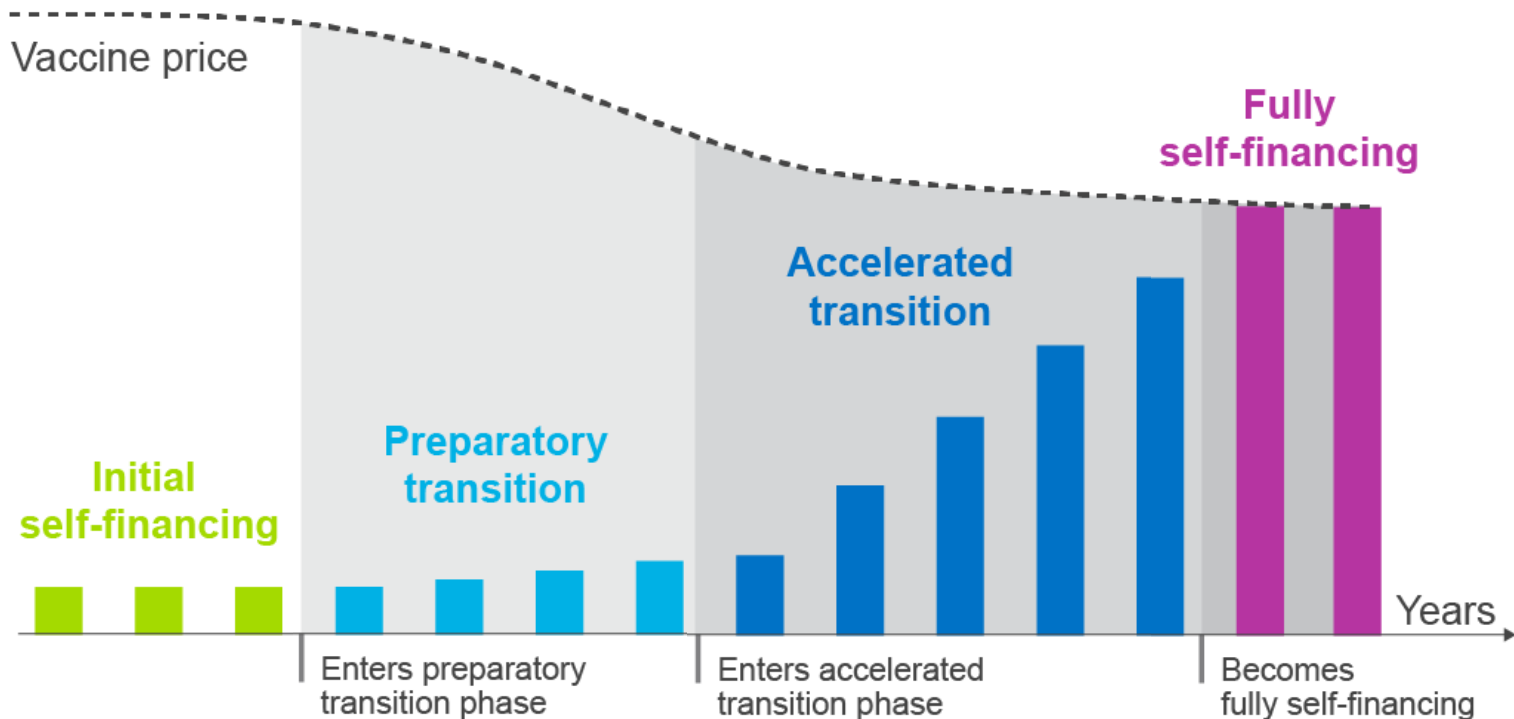
# Gavi's unusual development model



# HOW THE CO-FINANCING POLICY WORKS

## Co-financing level

(per dose)



Source: Gavi 2015.



# Changing mindsets

## In the vaccine manufacturing industry

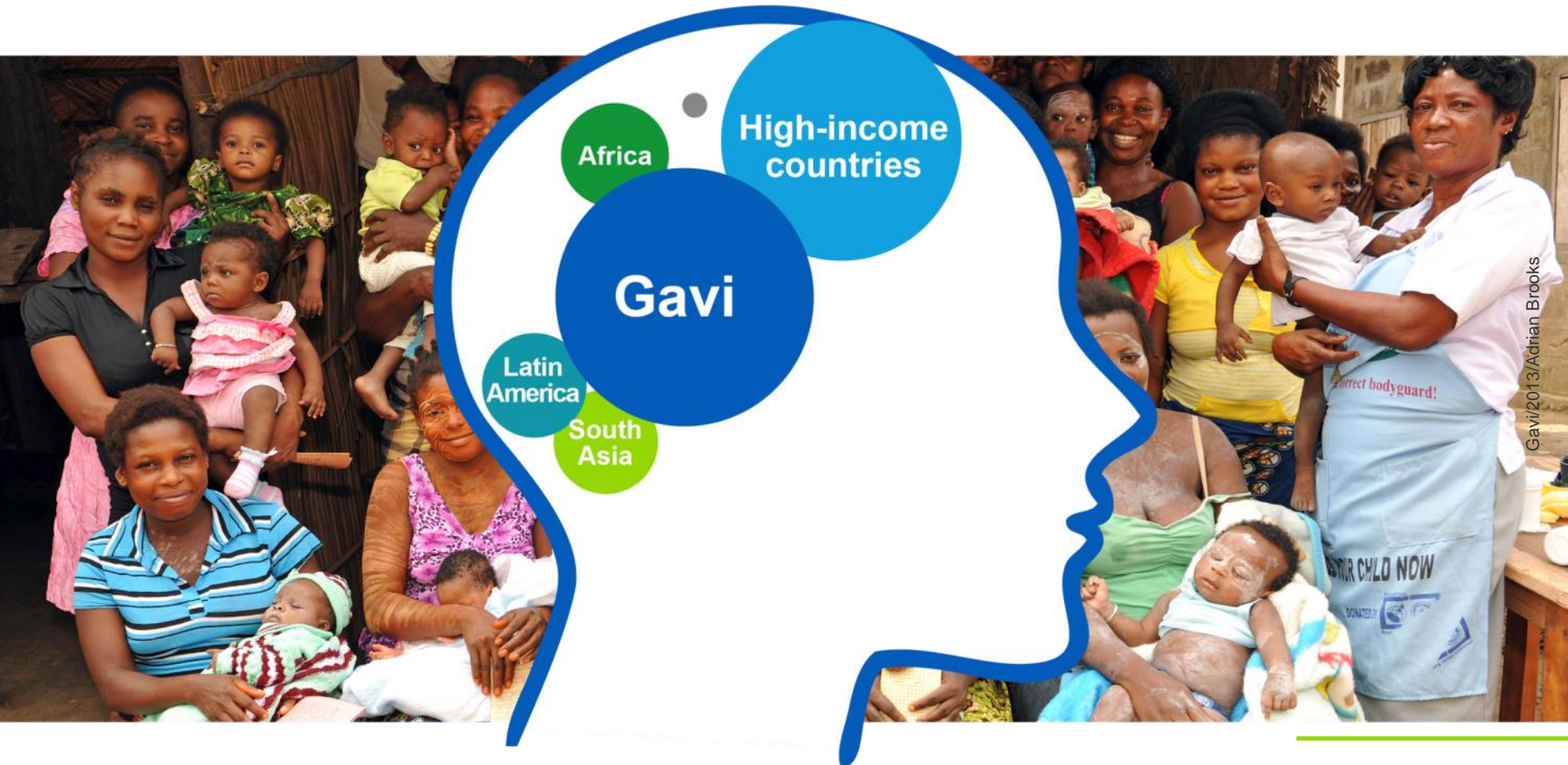


CDC/ Judy Schmidt; CDC/ Amanda Mills



# Changing mindsets

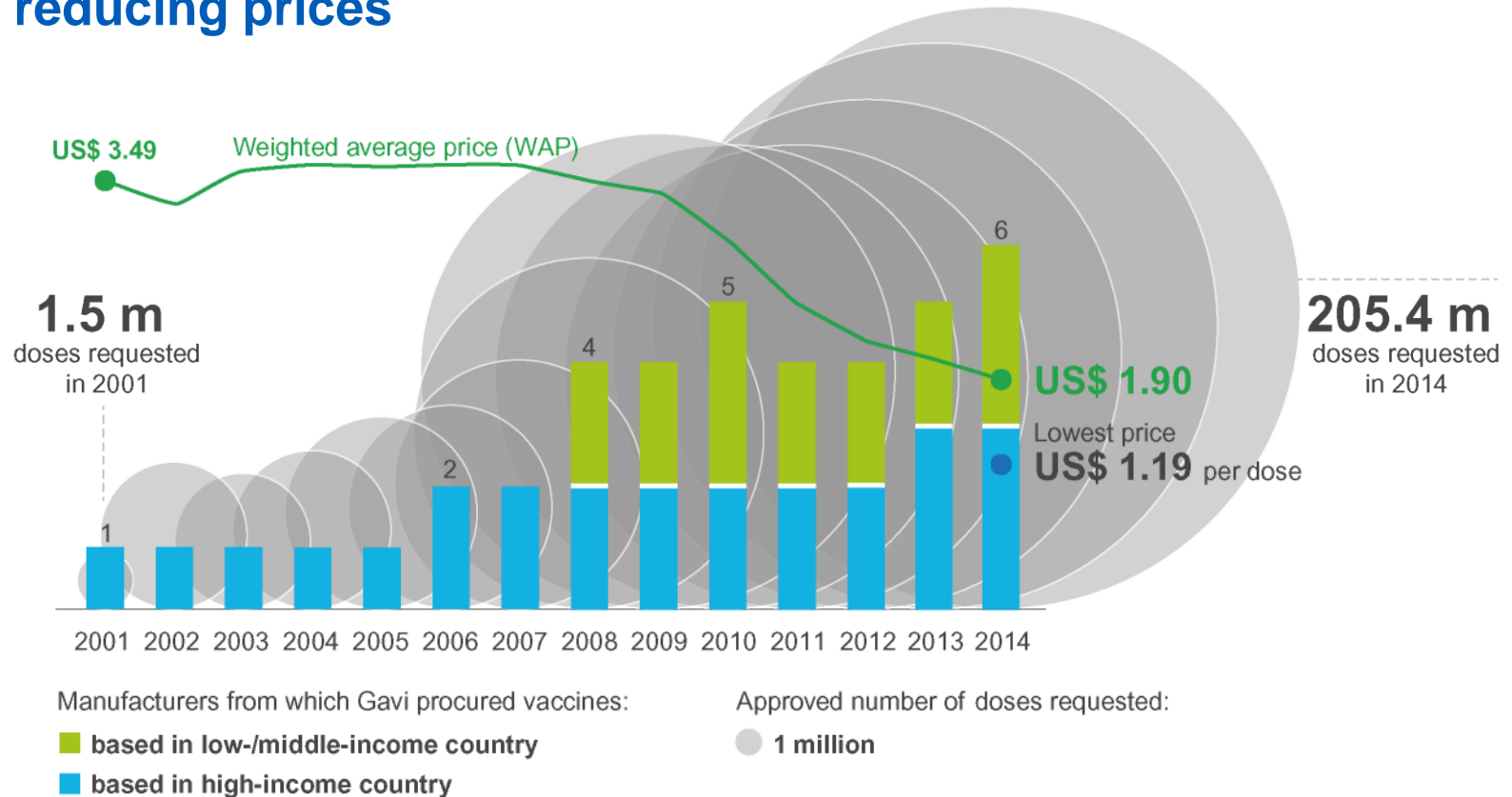
## In the vaccine manufacturing industry



Gavi/2013/Adrian Brooks

# Evolution of pentavalent vaccine market

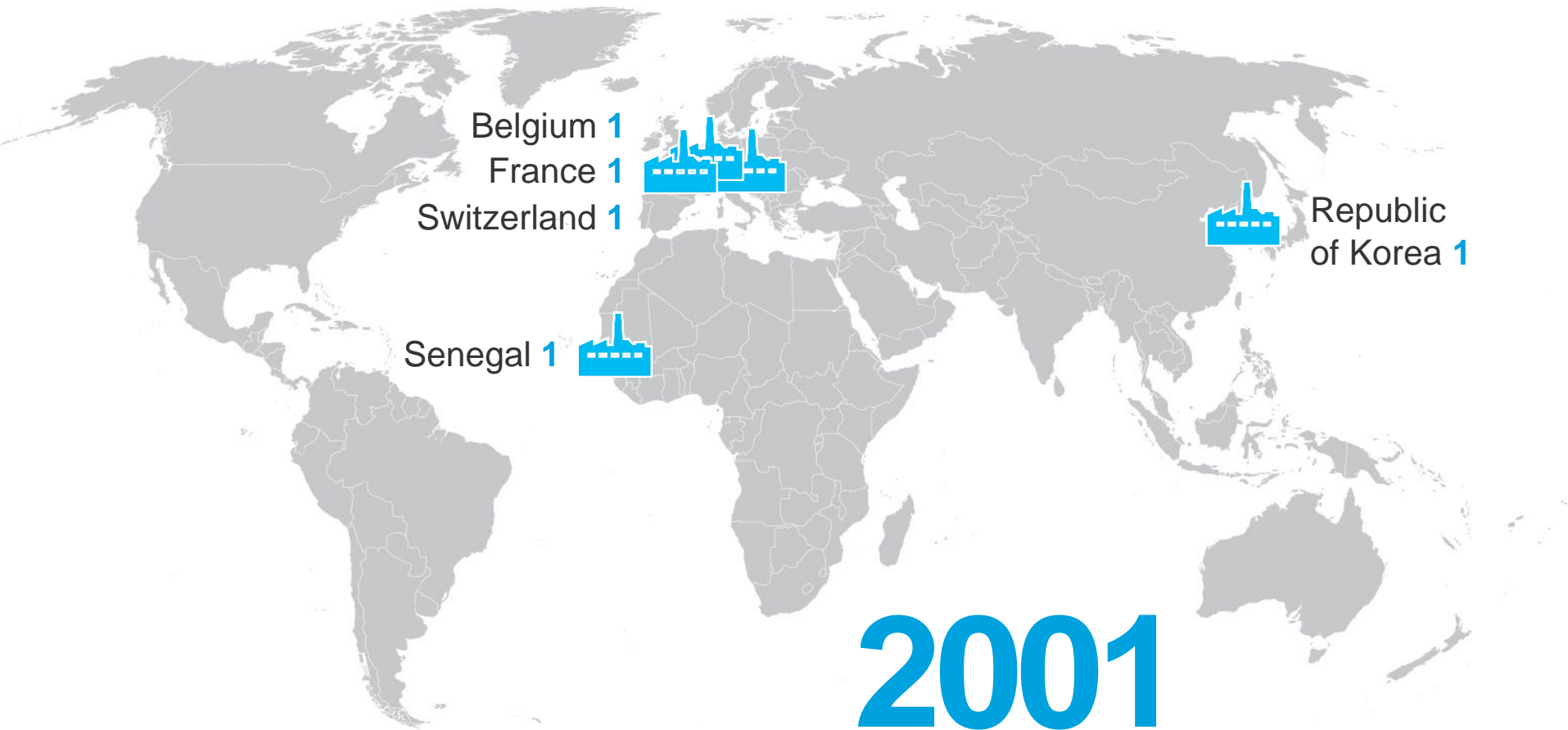
Increasing volumes, growing number of suppliers,  
reducing prices



Sources: UNICEF Supply Division 2015; country annual progress reports (requested doses).

# More secure vaccine supply

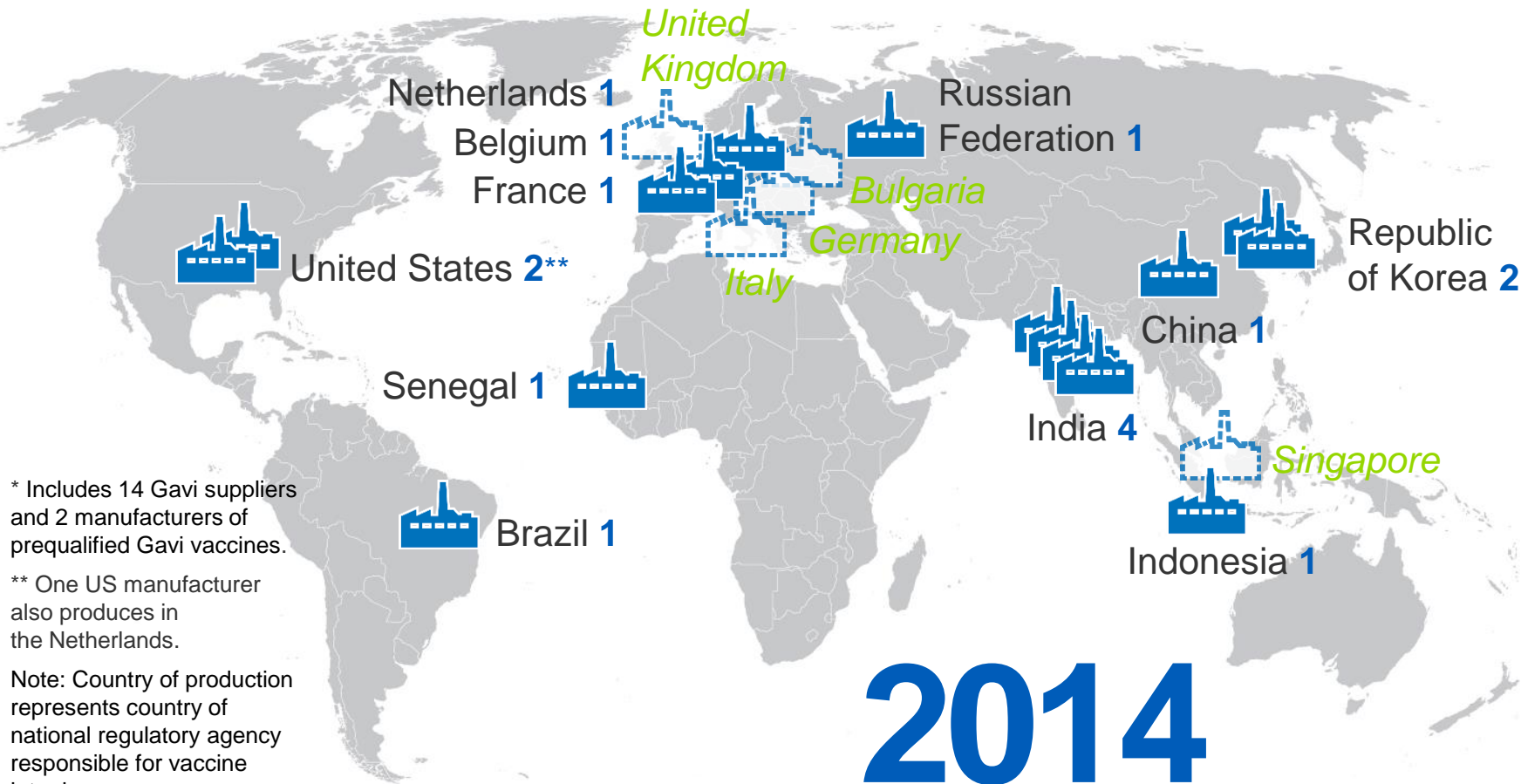
**2001: 5 suppliers from 5 countries of production**



Source: UNICEF Supply Division

# More secure vaccine supply

**2014: 16 manufacturers\* from 11 countries of production**



\* Includes 14 Gavi suppliers and 2 manufacturers of prequalified Gavi vaccines.

\*\* One US manufacturer also produces in the Netherlands.

Note: Country of production represents country of national regulatory agency responsible for vaccine lot release.

Source: UNICEF Supply Division and WHO list of pre-qualified vaccines, 2014



# China: from implementing country to Gavi donor



2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

Catalytic  
Gavi support

Self-financing  
vaccines

Supplier of Gavi-  
funded vaccines

Gavi donor

# Advance market commitment (AMC)

## Accelerating the manufacture and delivery of vaccines



**Donors commit** funds for new vaccines that meet stringent criteria and are requested by developing countries, at pre-agreed price



**Manufacturers get incentive** to invest in R&D – legally committing to supply vaccines at lower prices in the long term

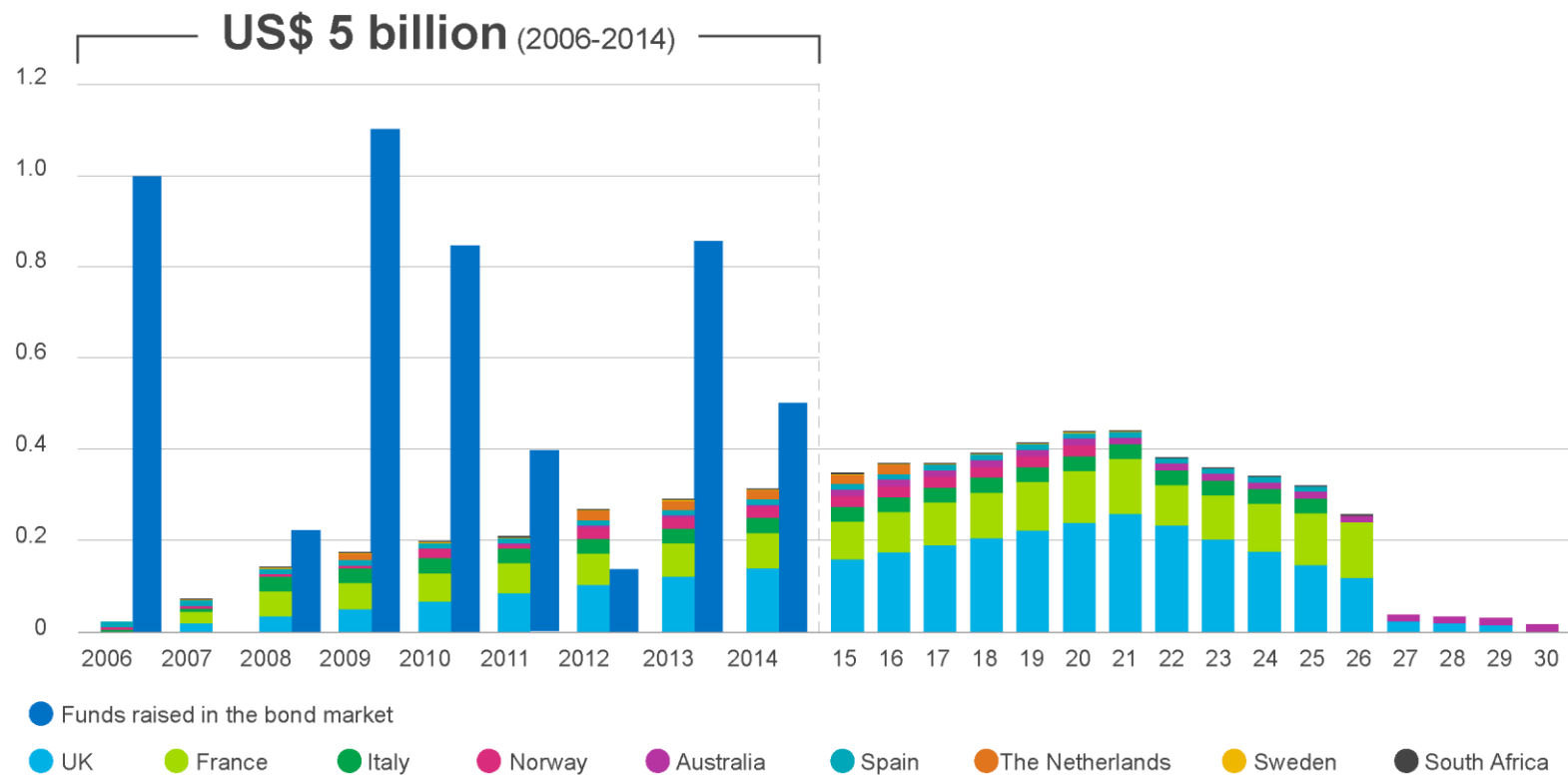


**Developing countries and Gavi pay long-term, lower price** for the vaccines

(from left to right): Gavi/2014/D.Rowe, Gavi/2007/Atul Loke, Gavi/2012/Sala Lewis

# IFFIm frontloading

Long-term donor pledges are converted into immediately available funding for immunisation



Source: World Bank, 2015



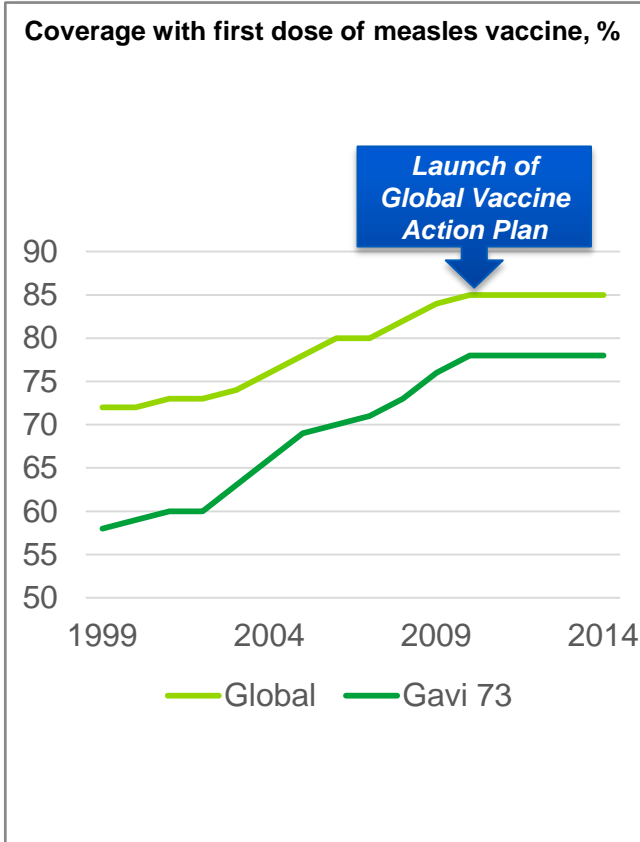
# Advanced purchase commitment for Ebola

- **Gavi commits towards future procurement with prepayment**
- **Merck commits to:**
  - EUAL dossier acceptance by December 31 2015
  - Make available 300,000 investigational doses by May 2016
  - Submit for licensure by December 2017

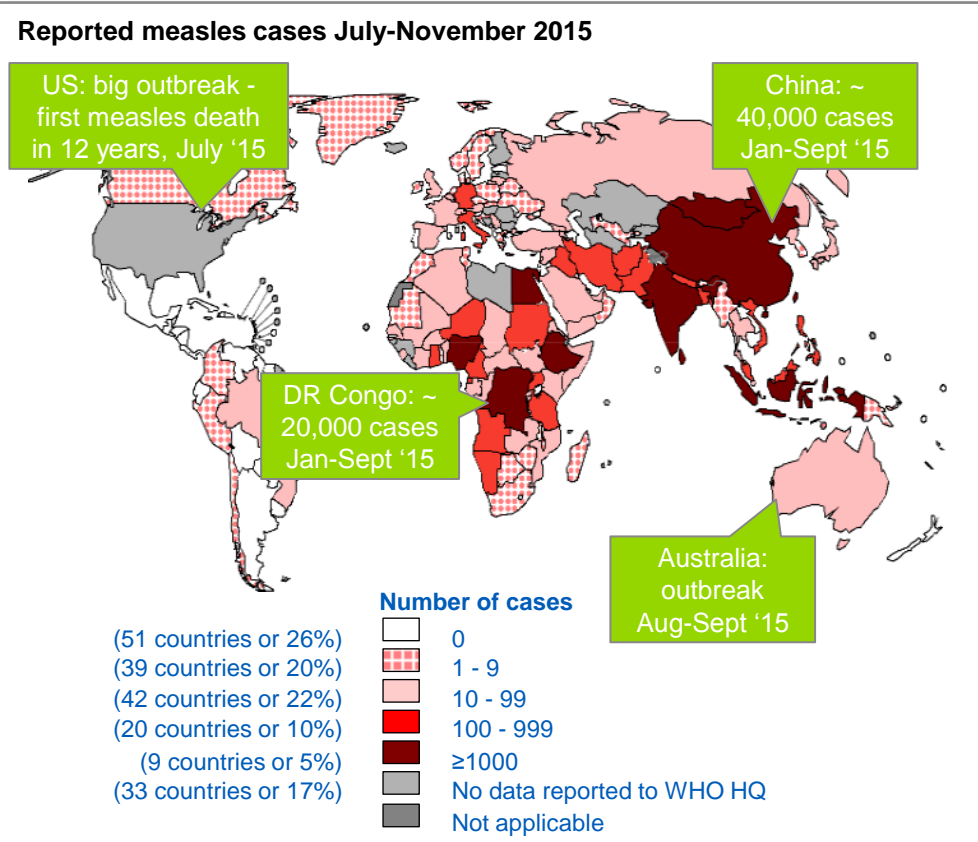


# After years of progress, measles control efforts stagnating and elimination off-track

**MCV1 coverage stagnant for past 5 years...**



**...and measles outbreaks resurgent in both developed and developing world**



Source: WHO/UNICEF Estimates of National Immunization Coverage 2014 revision, July 2015; WHO measles surveillance data as of 13 January 2016

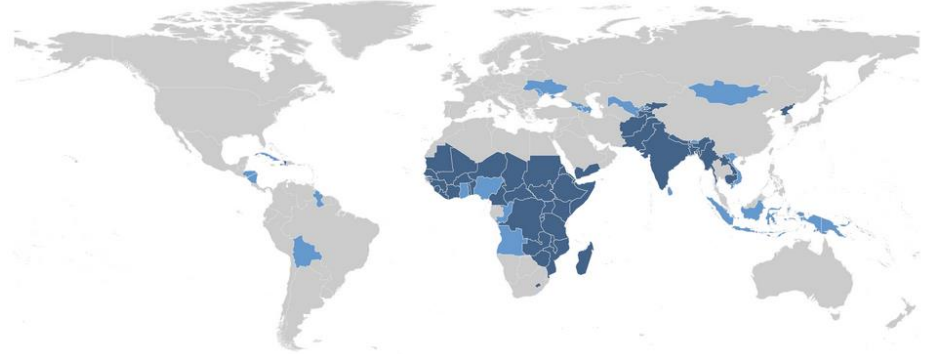
# Gavi supporting the countries most at risk from infectious diseases

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**>300 infectious diseases exist...**

**...<30 currently vaccine preventable**

**Gavi supports the poorest countries, home to 60% of the world's children**



# Powerful impact: meningitis A vaccine

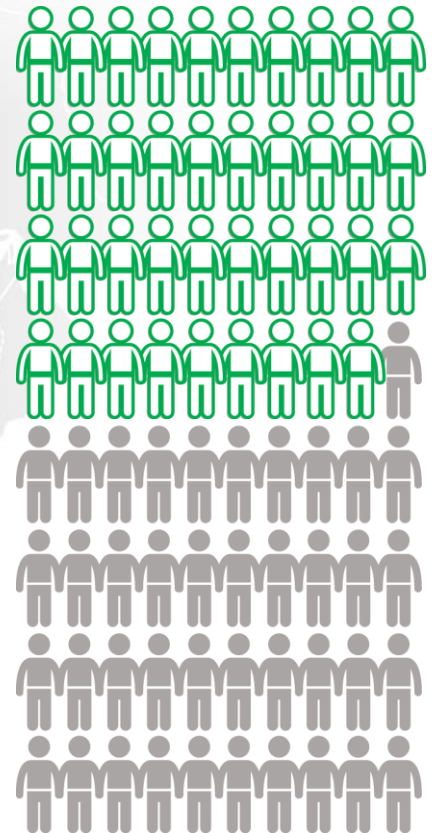
**450 million**  
**PEOPLE THREATENED**

**MORE THAN**  
**215 million**  
**PEOPLE**  
**VACCINATED**  
**SINCE 2010**

## IMPACT:

Number of meningitis A cases:

|              | <i>in 2008</i> |   | <i>in 2014</i> |
|--------------|----------------|---|----------------|
| Niger        | <b>842</b>     | ➔ | <b>0</b>       |
| Burkina Faso | <b>156</b>     | ➔ | <b>0</b>       |
| Mali         | <b>16</b>      | ➔ | <b>0</b>       |



# Global health security: Gavi's growing role in outbreak preparedness and response

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**Yellow fever**  
vaccine stockpile



**Measles outbreak**  
response



**Meningitis vaccine**  
stockpiles



**Oral cholera**  
vaccine stockpile



**Ebola vaccine**  
stockpile

# Four key enablers of vaccine development



**Recognise the lack of market potential**



**Build laboratory & outbreak investigation capabilities in countries**



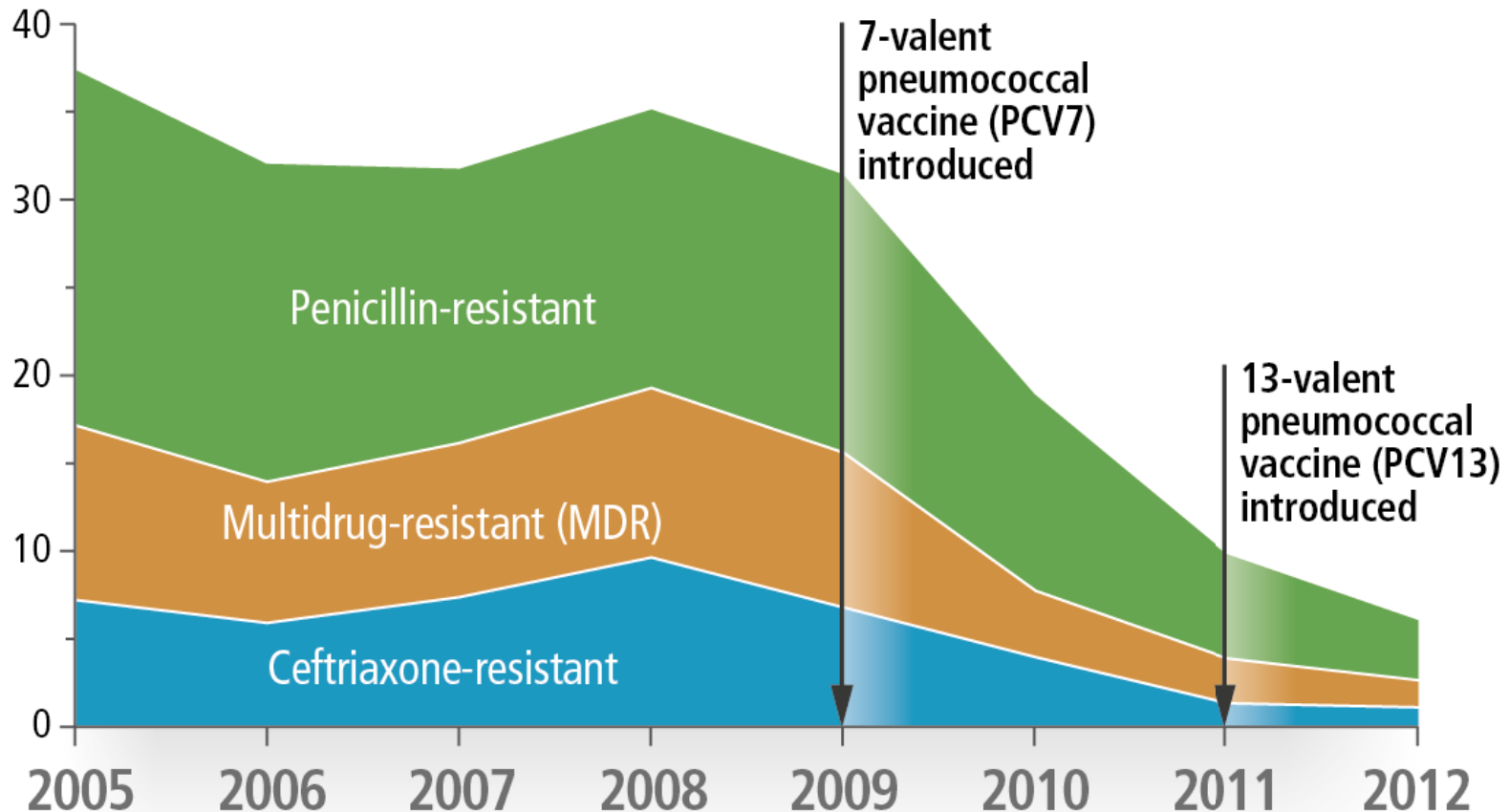
**Create repositories of potential agents & better catalogue their immunologic properties**



**Develop vaccine vector platforms**

# Vaccines reduce antibiotic resistance

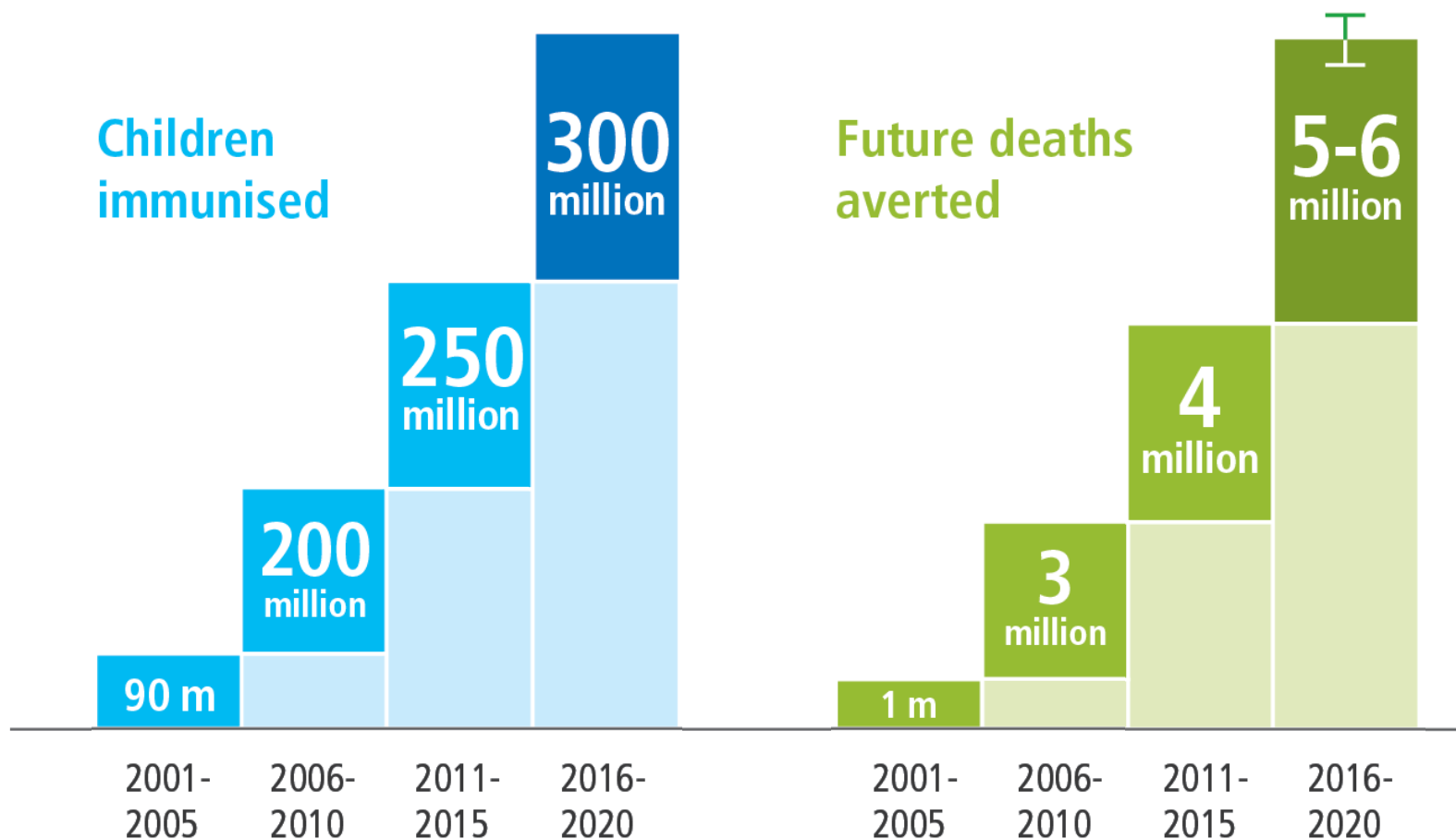
Incidence of antibiotic-resistant invasive pneumococcal disease in children < 2 years, South Africa (cases per 100,000 person-years)



Source: A von Gottberg et al, for GERMS-SA. Publication submitted April 2014.



# Accelerating impact 2016–2020



**Sources:** Gavi strategic demand forecasts 9 and 10,  
*Investing together for a healthy future: the 2016–2020 investment opportunity.*

# THANK YOU

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